SECTION I NM 48/99

Chart 16640

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16646

NM 48/99

### CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16647

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16648

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

SECTION I NM 48/99

Chart 16660

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16661

NM 48/99

### CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16662

NM 48/99

### CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 16663

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

SECTION I NM 48/99

Chart 16665

NM 48/99

# CAUTION

Significant changes in sea level have been observed in Cook Inlet. Actual depths may be shoaler than charted. Differences of up to 1/4 fathom can be expected. Mariners are urged to exercise caution when navigating in this area.

Chart 74581

NM 48/99

#### PILOTS

Pilotage at the Outer Pilot Boarding Place is compulsory only for vessels with a draft of 11m and above or for vessels that do not have the appropriate charts for the approaches to Fremantle. All other vessels should proceed direct to the Inner Pilot Boarding Place.

Pilotage is compulsory from the Inner Pilot Boarding Place for all non-exempt vessels.

**SECTION I** NM 48/99

NM 48/99 CHART 14832

BUFFALO HARBOR CHANNEL DEPTHS  TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEPT 1999  AND SURVEYS TO JUNE 1999											
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS					
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)			
BUFFALO HARBOR:											
SOUTH ENTRANCE INNER CHANNEL	28.6	27.6	26.3	23.5	1-99	400-1200	.37	29			
OUTER HARBOR SOUTHERN CHANNEL	20.1	25.9	25.4	24.8	1-99	1130-1425	.76	28			
OUTER HARBOR TURNING BASIN	19.0	20.9	21.0	22.1	1-99	900	.80	23			
OUTER HARBOR MIDDLE CHANNEL	20.9	24.7	25.5	23.1	1-99	500-1600	2.12	27			
OUTER HARBOR NORTHERN CHANNEL	18.3	21.6	22.4	22.3	1-99	1175-1350	.91	23			
BUFFALO RIVER ENTRANCE CHANNEL	A12.7	16.4	14.4	14.2	6-99	220-1625	.98	23			
BLACK ROCK CANAL:				-0000000							
ENTRANCE CHANNEL	20.1	21.2	17.6	B12.0	11,12-98	450-1000	.80	21			
BLACK ROCK CANAL TO LOCK	8.3	14.6	14.9	6.9	10,11-97; 11,12-98	200-350	3.05	21			
THENCE TO BUOY 12	15.9	19.1	17.7	9.0	11,12-98	200-400	1.70	21			

A. SHOALING TO 10.1 FEET IN OUTSIDE 50 FEET OF QUARTER.

NM 48/99 CHART 14833

BUFFALO HARBOR CHANNEL DEPTHS  TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEPT 1999  AND SURVEYS TO JUNE 1999											
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS					
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)			
BUFFALO HARBOR:											
SOUTH ENTRANCE INNER CHANNEL	28.6	27.6	26.3	23.5	1-99	400-1200	.37	29			
OUTER HARBOR SOUTHERN CHANNEL	20.1	25.9	25.4	24.8	1-99	1130-1425	.76	28			
OUTER HARBOR TURNING BASIN	19.0	20.9	21.0	22.1	1-99	900	.80	23			
OUTER HARBOR MIDDLE CHANNEL	20.9	24.7	25.5	23.1	1-99	500-1600	2.12	27			
OUTER HARBOR NORTHERN CHANNEL	18.3	21.6	22.4	22.3	1-99	1175-1350	.91	23			
BUFFALO RIVER:											
ENTRANCE CHANNEL	A12.7	16.4	14.4	14.2	6-99	220-1625	.98	23			
BUFFALO RIVER	7.5	C11.5	10.5	B10.6	6-99	100-700	5.27	23			
BUFFALO SHIP CANAL	18.2	20.4	13.6	D10.1	6-99	125	1.02	23			
BLACK ROCK CANAL:											
ENTRANCE CHANNEL	20.1	21.2	17.6	E12.0	11,12-98	450-1000	.80	21			
BLACK ROCK CANAL TO LOCK	8.3	14.6	14.9	6.9	10,11-97; 11,12-98	200-350	3.05	21			

A. SHOALING TO 10.1 FEET IN OUTSIDE 50 FEET OF QUARTER.

B. SHOALING TO 5.1 FEET IN OUTSIDE 50 FEET OF QUARTER.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

B. SHOALING TO 3.3 FEET WITHIN 100 FEET OF EITHER SIDE OF RAILROAD BRIDGE AT 42°51'46.2"N - 78°51'13.1"W.

C. SHOALING TO 3.5 FEET WITHIN 100 FEET OF EITHER SIDE OF RAILROAD BRIDGE AT 42°51'36.2"N - 78°50'55.6"W.

D. SHOALING TO 5.1 FEET IN OUTSIDE 30 FEET OF QUARTER.

E. SHOALING TO 5.1 FEET IN OUTSIDE 50 FEET OF QUARTER.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION